



IV. BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is an illustration of a conductive coating and metal layer applied dielectric material with a desirable tooth structure;

5 Figure 2 is an illustration of a prior art conductive coating and metal layer on the applied dielectric material with the surface produced by roughening processes;

Figure 3 is an illustration of a double sided printed circuit board without plated through holes;

Figure 4 is an illustration of a multilayer printed circuit board with plated through holes, filled or unfilled with conductive or nonconductive material;

10 Figure 5 is an illustration of a multilayer printed circuit board without plated through holes;

Figure 6 is an illustration of a multilayer printed circuit board having more than two layers with plated through holes filled or unfilled with conductive or nonconductive material;

Figure 7 is an illustration of any of the foregoing printed circuit boards after applying a dielectric material thereon;

15 Figure 8 is an illustration of the multilayer printed circuit board of Figure 7 after forming micro vias;

Figure 9 is an illustration of the multilayer printed circuit board of Figure 7 after opening the through holes and after etching the applied dielectric material to produce the teeth illustrated in Figure 1;

20 Figure 10 is an illustration of the multilayer printed circuit board of Figure 9 after application of a conductive coating to fill in around the teeth and connect micro via holes and the through holes and

Figure 11 is an illustration of the multilayer printed circuit board of Figure 10 after plating the conductive coating to form a metal layer and complete forming circuitry.

25 V. DETAILED DESCRIPTION OF THE DRAWINGS

Figure 1 is an illustration of a conductive coating and metal layer on the applied dielectric material with a desirable tooth structure. In contrast, Figure 2 is an illustration of a prior art conductive coating and metal layer on the applied dielectric material with the surface produced by roughening processes. In both Figures 1 and 2, show a dielectric material and a combination of a thin conductive coating and metal later. Compare

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